

## Worksheet 1: Starting Out

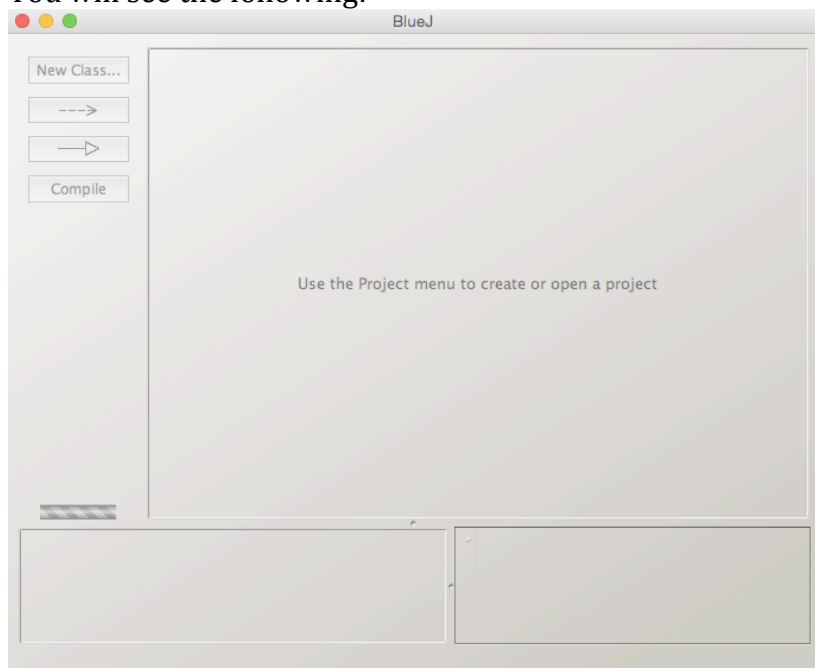
For lab session 1.

In this worksheet you will start up BlueJ and use its codepad feature to run a simple hello world program.

### Steps

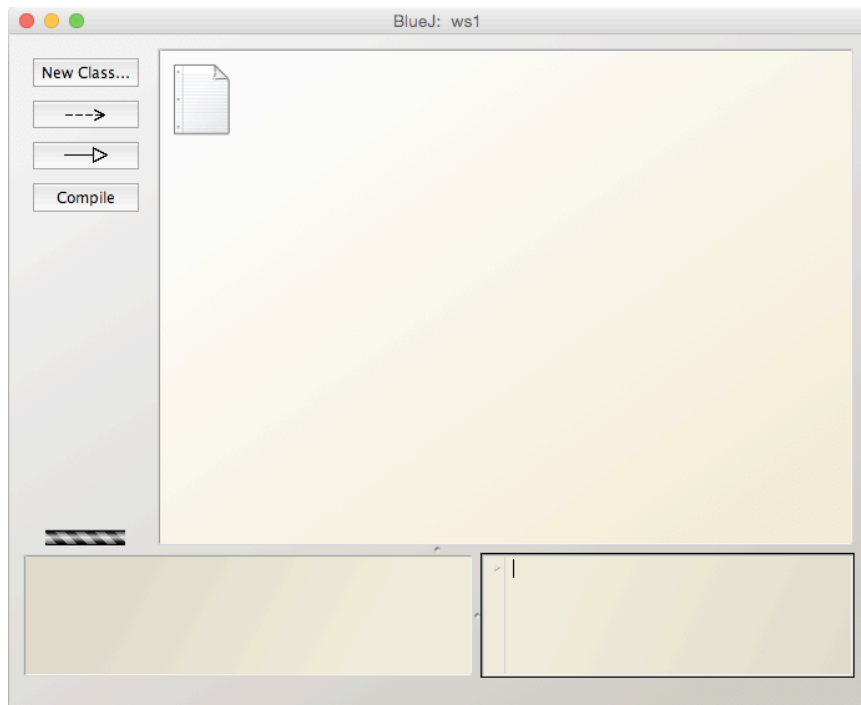
1. Log into your computer
2. Start the BlueJ program under the start button All Programs/ Courseware/ Computer Science

You will see the following:

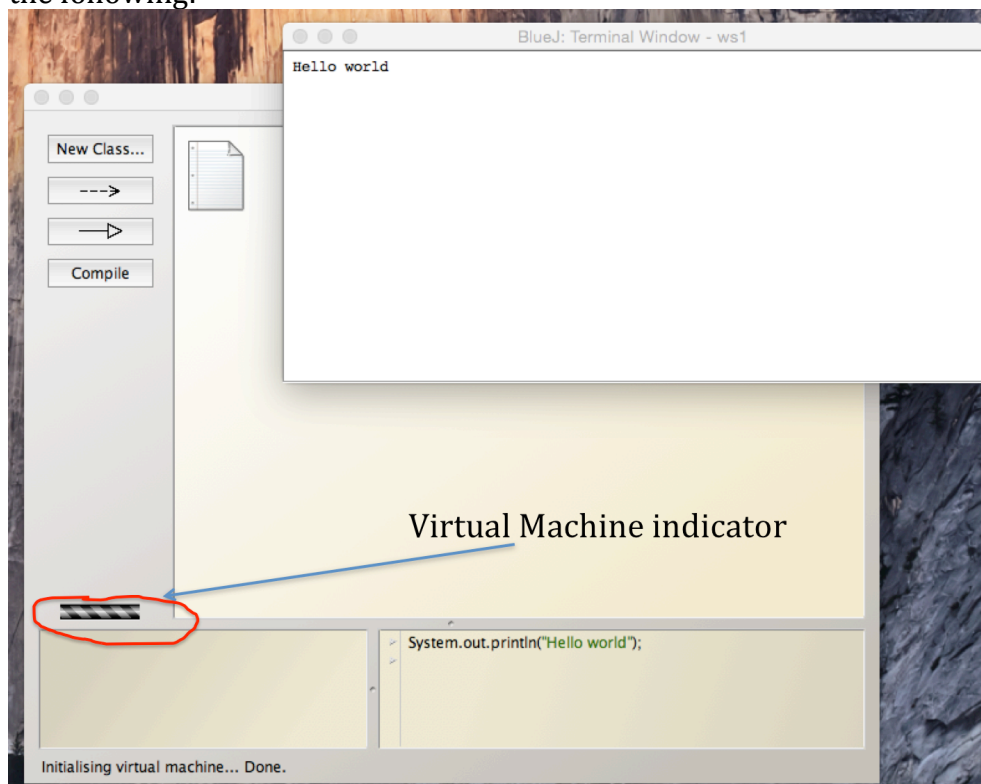


This is the Macintosh view. It will look a little different on Windows and other operating systems: e.g. the menus will be attached to the window. These menus are Project, Edit, Tools, View and Help.

3. You will need to open a new BlueJ project by selecting Project->New Project and then giving the project a name (e.g. ws1) and storing in a suitable place on your filestore. You should now see (next page):

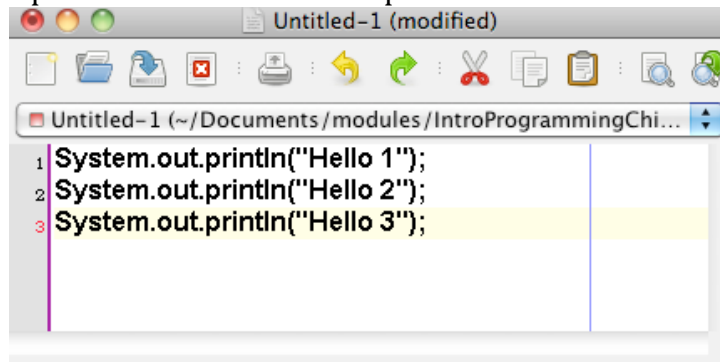


4. For the moment we will just use the codepad in the bottom right-hand corner. Make that part of the tool bigger. If the codepad isn't being displayed then select the menu *View->Show code pad*.
5. Now type in the *println* statement and hit the return key. You should see the following:



6. If at any point you want to clear the codepad and tell BlueJ to forget what you typed then right click on the VM indicator and select reset.

7. If you want to clear the console then use the console's Options->Clear menu item.
8. Try the following variations:
  - a. Change println with print. What difference does that make? You will need to execute the print twice to see the effect.
  - b. Add a new-line character, e.g. "Hello world\n". This is just another way of saying give me a new line. You can put this anywhere in the string.
  - c. Add spaces to the text you display and see the effect.
  - d. What happens if you leave out the ";" character? This is part of the Java language syntax. It's a bit like a full stop in English meaning this is the end of the current instruction (called a statement in Java). The programs that read your program and run them (e.g. the Java compiler) are not very clever! You have to tell them exactly what you want. They won't just think "he forgot the ';' I'll put it in for him".
  - e. Open a text editor like Notepad++ and enter the following:



```
1 System.out.println("Hello 1");
2 System.out.println("Hello 2");
3 System.out.println("Hello 3");
```

You can save the file under your filestore if you wish. It's not a proper Java file so you can use a .txt extension.

- f. Copy and paste the text into BlueJ's codepad and then hit the return key and see what happens. Notice how BlueJ gets Java to run this code one statement at a time (but very quickly!). This demonstrates that many programs are sequential: they run one instruction after the next, sequentially.